

## WSAS Mobilisation and Tissue Integrity Workshop

Practical Workshop | Ranell Hobson



Mobilisation techniques to address joint and muscle dysfunction for enhanced athletic performance

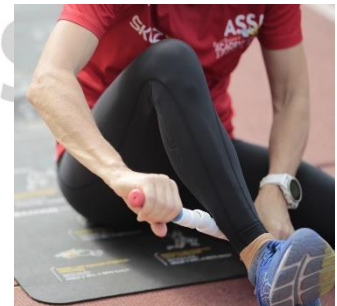
*Ensuring athletes have the physical capacity to achieve desired positions and postures in a variety of athletic patterns in both the strength room and in competitive environments is crucial for continued loading and force production capabilities. In this practical workshop you will learn a variety of ways to mobilise the pelvic girdle and calf complex for improved athletic performance and recovery.*

**Introduction:** As a Strength and Conditioning Coach, I find all too often that athletes have an inability to achieve the desired positions and postures required, to apply maximal force to the playing surface for explosive speed. No amount of expert cueing will get an athlete into a position that their body does not have the physical capacity to go. These restrictions, most notably in the pelvic girdle and ankle complex, carry through into the weight room where compensations for inadequate dorsiflexion and hip mobility impact the loading of musculature and increase risk of player injury.

What follows, are techniques I use to repair tissue integrity and joint mobility to get my athletes loading correctly both in the gym and out on the field.

### **Techniques used in the practical:**

**Pressure Wave** - We'll start by using a roller or a Massage Stick to press deep into muscle tissue and begin to relax. Slowly rolling through Quadriceps, Adductors, Hamstrings, Abductors, IT Band and Calf Complex. We will work deep into the Achilles.



**Action Yoga:** We will dynamically move in and out of yoga positions to increase blood flow and synovial fluid lubrication of joint structures.



**Banded Distraction** – We will use banded distraction with traditional stretches to work deeper into the musculature and positively effect the joint capsules of the Ankle and Hip.

**ART – Active Release Therapy (Tack and Stretch)** – We will use any equipment we find, barbells, tack balls, acu balls, even our own thumbs to work on sliding surfaces and soft tissues. We will press down on stiff sore tendon or musculature and stretch the tacked connective tissue, restoring its integrity.

**End Range Tension Oscillation** – We will use stretching straps, towels or our own bodyweight to lengthen tight muscles and move in and out of end range to improve pliability and tissue integrity.

**Calf Complex:** Here we combine a banded calf stretch with self-myofascial release. The former helps to improve the range of motion at the joint. The latter takes care of any knots in the sliding surfaces of the muscle. Massage Stick Pressure Wave – Banded distraction with Stretch (Both Soleus and Gastrocnemius) – Barbell Tack and Stretch.

1. **Banded Distraction with stretch** – place band around ankle pulling backwards and go into a toe up stretch on a box.
2. Lift into the box to stretch, turn the knee out a little bit and press forward.
3. Keep the leg straight and bring your hip to the box. 5 secs on 10 sec off in combination with the distraction.
4. Keep the leg straight to hit the gastrocnemius and bring the knee forward to work into the soleus and that distal heel chord.
5. Press down into some mixed corners in and out.
6. Work on each ankle for 2 to 3 minutes.
7. Press down on the band to increase the tension, doubling or even tripling the force vector at the joint.
8. **Sliding surface and soft tissues** - Sit on the floor with our proximal Achilles sitting on top of a barbell, stick or dowel, place the other leg on top to lock it down.



9. **Tack and Stretch** - reach forward to hold onto the barbell, stick or dowel keep your abs tight. Flex and extend the foot, move it through small circles. If you find tight spots



then spend time there. Roll it around, release the tender spots, then move the bar up 1 – 2 cms and start again. Always moving through the soft tissue by flexing and extending, rolling the foot left and right and around.

10. Roll through the entire area until there's no tightness.
11. Be sure not to pull the foot so far back that you go into a neural tension stretch.
12. Then go through it again on the other side.

**Hip Flexor:** Any athletes that accelerate out from an upright position or out of a jog or run, need sufficiency in their anterior hip. I have numerous examples of athletes who have movement restrictions through the hip flexors and quads. This trio of exercises will open up the hips and regain movement quality.

1. Start by opening up the hip with the band, place the band just under the gluteal fold sit into a 90/90 stretch position. Get as much band tension as you can. (Really strong boys will need to double the bands up or use a heavy thick band). Oscillate in and out of the ROM if really tight.
2. Rib cage in and down, laterally bend away from the distraction. Push the hip forward and tuck the hips under. Do this for 1- 2 minutes.
3. Now pull the rear leg up to get deep into middle quad.
4. Stay up tall if you can, press the front foot into the ground and work through the distal portion down by the knee.
5. Move around a little and find those bands of restriction and lock it in.
6. This can be done with support against a wall with a foam knee support for older athletes. Rotate between finding the restrictions and holding and moving around and oscillating in and out.





7. Spend 1 to 2 minutes in there.
8. Now we roll out through the VMO (vastus medialis oblique), explore all of those tight spots. The medial head can get really worked. The goal is to unglue the soft tissue.

**Hamstrings:** I like to work on the Hamstrings with a combination of closed chain and open chain stretches. Closed chain our feet are fixed to the floor and Open chain work through the hamstring while lying down.

I have never met an athlete that did not need to give some attention to their hamstrings. It's not enough to train the ROM required I want to train past the actual needs in mobility so that competition range is easy and fluid and fuel efficient. It's all about Hip extension whether the foot is fixed as in sprinting or the torso is fixed as in kicking.

1. **Banded Distraction** - Place the band under the gluteal fold. Get as much tension as you can. Take a large step back with the other leg. Get into a split stance and flex and extend the knee to work through the tissues of the hamstring.
2. **ERT Oscillation** - We've loaded the hip, we have tension in the hamstring and we are just going to move that in and out.
3. Spin around and reverse it, get the band pulling the hip capsule back and you start to feel a very different stretch. **Flex and Extend** the knee 30 to 40 times on each side.
4. We move to Open chain now and get down onto our backs with our head near the band attachment point. Place the band over the foot, and pull the foot back down to the floor.
5. Bring the leg back under complete control, don't let it snap back. Developing stiffness and control. This is going to break open any adhesions that may be present. Do 20 – 30 reps per leg.



6. Add some band distraction at the hip pulling the hip capsule down. The athlete will need to hold the band down at this point to prevent it from slipping off. Go back and continue taking the leg down and up again with complete control, add a little speed if possible.
7. This is great for athletes with hamstring problems, it will unglue the nerve and proximal hamstring tissues.

**Finally:** When creating mobilisation patterns think about: Joint Capsule, Motor Control, Stiffness and Length.

Now let's get into some self-massage care for the lower leg and foot.

Refer to the QAS Self Massage booklet.

